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MANELLI DENISON & SELTER 2000 M STREET NW SUITE 700 WASHINGTON, DC 20036-3307		SHIPPEN, MICHAEL L		
		ART UNIT		PAPER NUMBER
		1621		

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 08/860,007

Filing Date: August 04, 1997

Appellant(s): BERSCHEID ET AL.

Jeffrey Melcher
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed August 3, 2004.

(1) Real Party in Interest

A statement identifying the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

(3) Status of Claims

The statement of the status of the claims contained in the brief is incorrect. A correct statement of the status of the claims is as follows:

This appeal involves claims 8, 13, 14, 16-18, 21-26 and 33-35.

Claims 19, 20, 28-32 and 36-47 stand withdrawn from consideration as not directed to the elected invention or species.

Claims 1-7, 9-12, 15, 27 and 27 have been canceled.

(4) Status of Amendments After Final

No amendment after final has been filed.

(5) Summary of Invention

The summary of invention contained in the brief is correct.

(6) Issues

The appellant's statement of the issues in the brief is correct.

(7) Grouping of Claims

The rejection of claims 8, 14, 16-18, 21-25 under 35 U.S.C. 103(a) as being unpatentable over HOPP (USP 4,110,430) stand or fall together because appellant's brief does not include a statement that this grouping of claims does not stand or fall together and reasons in support thereof. See 37 CFR 1.192(c)(7).

Appellant's brief includes a statement that claims 13 and 33-35 do not stand or fall together but does not provide reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8). Accordingly it is considered that the rejection of claims 8, 13, 14, 16-18, 21-25 and 33-

35 under 35 U.S.C. 103(a) as being unpatentable over SIPOS (USP 4,321,257) stand or fall together.

Claim 26 alone stands rejected under 35 U.S.C. 103(a) as being unpatentable over HAFNER (USP 4,968,668) in view of VOGEL (A Textbook of Practical Organic Chemistry).

(8) *ClaimsAppealed*

The copy of the appealed claims contained in the Appendix to the brief is correct.

(9) *Prior Art of Record*

US 4,110,430	HOPP	8-1978
US 4,321,257	SIPOS	3-1982
US 4,968,668	HAFNER	11-1990

VOGEL, "A Textbook of Practical Organic Chemistry," 3rd Ed., pp. 483-488 (1965)

(10) *Grounds of Rejection*

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

Claims 8, 14, 16-18, 21-25 stand rejected under 35 U.S.C. 103(a) as being unpatentable over HOPP (USP 4,110,430).

In the remand of January 29, 2003, the board indicate they have difficulty understanding the Examiner's reasoning and have instructed the Examiner to adhere to

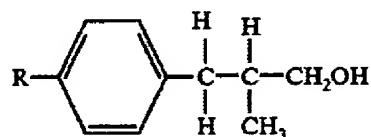
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the model set forth in MPEP 706.02(j) to explain the rejection to the board. This section of the MPEP states in part the Examiner should set forth:

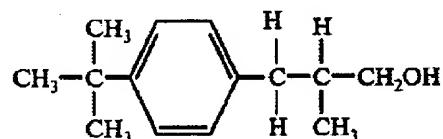
- (A) the relevant teachings of the prior art relied upon, preferably with reference to the relevant column or page number(s) and line number(s) where appropriate,
- (B) the difference or differences in the claim over the applied reference(s),
- (C) the proposed modification of the applied reference(s) necessary to arrive at the claimed subject matter, and
- (D) an explanation why one of ordinary skill in the art at the time the invention was made would have been motivated to make the proposed modification.

ITEM (A) HOPP teaches compositions and use thereof using active agents of formula I.

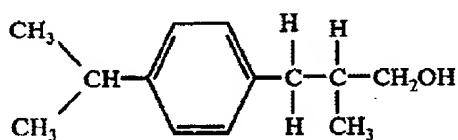
As is readily seen from the picture of formula I in column 1 of the reference, the active agents of HOPP of formula I have the structure



wherein R represents isopropyl or tert.butyl. The structures of these prior art species can be pictured as



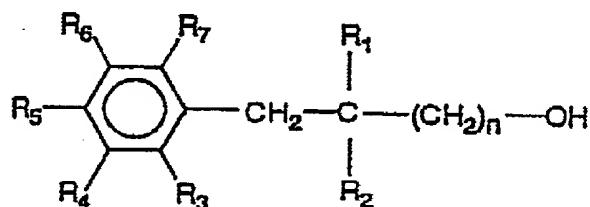
and



One looking at HOPP will readily note that these active agents are disclosed throughout the six column reference as being useful in germ-inhibiting agents and deodorant compositions¹. It is also without difficulty noted by one looking at the reference that throughout the reference mention is made of variety carriers² including alcohols (ethanol, isopropanol, propylene glycol at lines 17-18 of column 2; alcoholic solution at line 61 of column 2, ethanol in Examples 1 and 2), solvents (first two full paragraphs of column 2 and the Examples) and surfactants (soaps at line 26 of column 2 and Examples 3 and 4; and agents such as glyceride mixture, fatty acid amidomethyl betaine and the sodium laurylether sulphate of Examples 5 and 6 all of which are surfactants).

ITEM (B) The prior art active agent differs from what is claimed only as to the position of the alkyl group on the benzene ring or in a homologous manner. This is apparent from by looking at instant claims 14, 21, 22 and 24.

Claim 14 reads, *inter alia*, on a composition comprising an alcohol, solvent or surfactant and a compound of the formula



¹ Note the title, the abstract, the first, fourth, seventh and eight full paragraph and last paragraph of column 1, Examples 1-6, and the claims of the reference.

² Note entire column 2, Examples 1-6 and claim 5 of the reference.

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wherein

 R_1 may be hydrogen, or C₁₋₈ alkyl R_2 may be C₁₋₈ alkyl R_3-R_7 may be hydrogen or C₁₋₈ alkyl, and n is 1 or 2

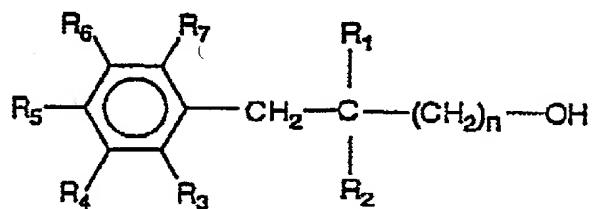
provided

- (i) when R_1 and R_3-R_7 are hydrogen, then n is 2;
- (ii) when R_1 and R_2 are C₁₋₆ alkyl and
 - a) R_3-R_7 are hydrogen, or
 - b) R_5 is methyl and R_3 , R_4 , R_6 , R_7 are hydrogen, then n is 2;
- (iii) when R_1 , R_2 and R_4 are methyl and R_3 and R_5-R_7 are hydrogen, then n is 2;
- (iv) when R_1 , R_3 , R_4 , R_6 and R_7 are hydrogen and R_5 is methyl, isopropyl or tert-butyl, then n is 2;
- (v) when R_1 , R_3 , R_6 and R_7 are hydrogen, R_2 is methyl and R_4 and/or R_5 are hydrogen or C₁₋₆ alkyl, then n is 2;
- (vi) when R_1 and R_4-R_7 are hydrogen, R_2 is methyl or ethyl and R_3 is methyl, then n is 2; and
- (vii) when R_1 , R_3 , R_5 and R_7 are hydrogen, R_2 is methyl, R_4 and R_6 are methyl or R_4 is hydrogen, and R_6 is methyl, then n is 2;

Claim 21 reads, *inter alia*, on a shampoo or shower gel comprisingan alcohol, solvent or surfactant,

a re-fattening agent

and a compound of the formula



wherein

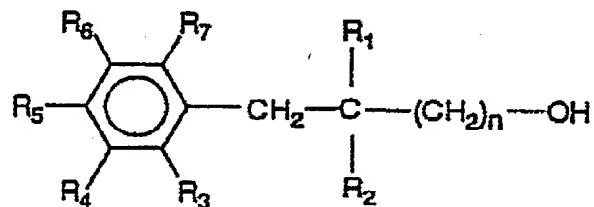
 R_1 may be hydrogen, or C₁₋₈ alkyl R_2 may be C₁₋₈ alkyl R_3-R_7 may be hydrogen or C₁₋₈ alkyl, and n is 1 or 2

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provided

when R₁, R₃, R₄, R₆ and R₇ are hydrogen and R₅ is methyl, isopropyl or tert-butyl, then n is 2;

Claim 22 and 24 read, *inter alia*, method comprising apply to a surface a composition comprising an alcohol, solvent or surfactant and a compound of the formula



wherein

R₁ may be hydrogen, or C₁₋₈ alkyl

R₂ may be C₁₋₈ alkyl

R₃-R₇ may be hydrogen or C₁₋₈ alkyl, and

n is 1 or 2

provided

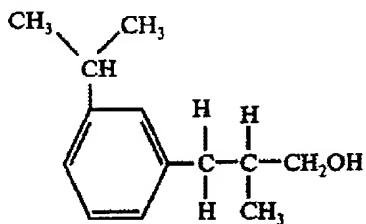
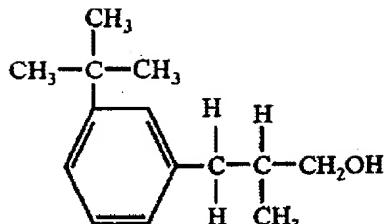
when R₁, R₃, R₄, R₆ and R₇ are hydrogen and R₅ is methyl, isopropyl or tert-butyl, then n is 2.

One would recognize that the claims read on compositions and their use containing the active agent wherein R₁, R₃, R₄, R₅ and R₇ are hydrogen, R₂ is methyl³ and R₆ is isopropyl or tert-butyl⁴, and n is 1. These claimed active agents have the structures which can be pictured as

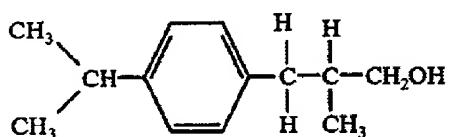
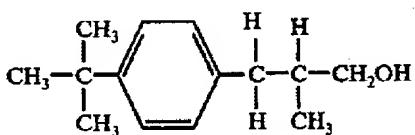
³ Methyl is a C₁ alkyl group and within the purview of the claimed C₁₋₈ alkyl group.

⁴ Isopropyl is a C₃ alkyl group and tert-butyl is a C₄ alkyl and within the purview of the claimed C₁₋₈ alkyl group.

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**CLAIMED ACTIVE AGENT 1****CLAIMED ACTIVE AGENT 2**

The structural relationship of these claimed active agents compared to the HOPP active agents is characterized as "positional isomers". Those familiar with the chemical practice understand that this means the isopropyl or tert-butyl group is bonded to different carbons of the phenyl ring⁵ in the respective compounds as which can be readily seen by comparing the respective pictures thereof.

**HOPP ACTIVE AGENT 1****HOPP ACTIVE AGENT 2**

In addition, one can also identify a number of claimed active agents that are homologues⁶ of the prior art active agents. There are a number of adjacent homologues^{7,8} such as:



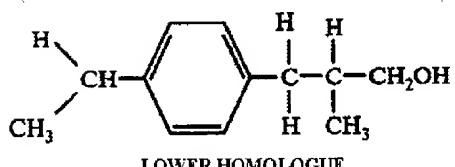
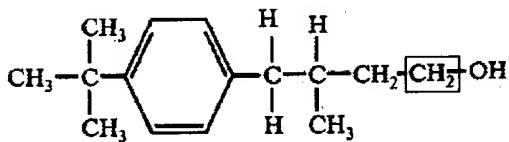
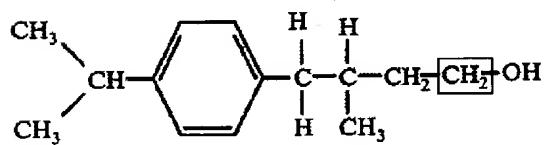
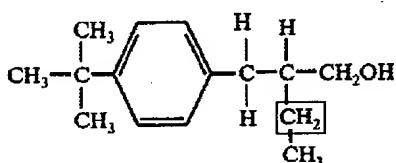
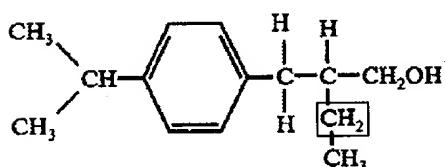
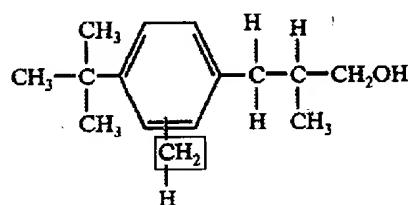
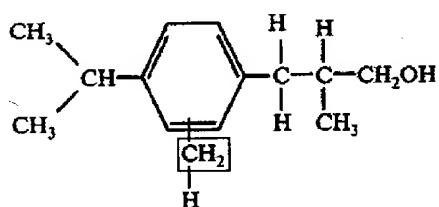
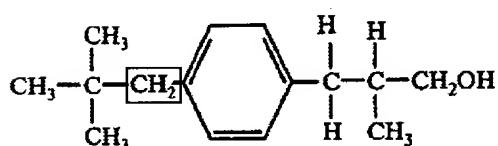
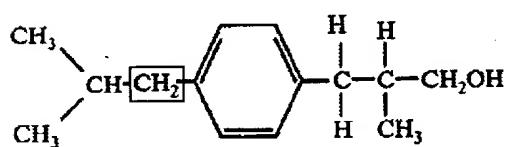
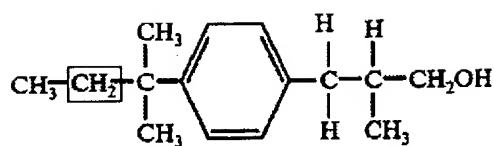
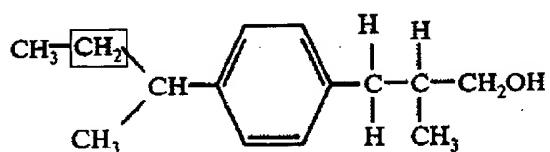
⁵ The phenyl ring is shown as or in the structural formulae above.

⁶ Homologues are compounds that differ by methylene (- CH_2 -) linkages.

⁷ A homologue that differs by only a single methylene linkage.

⁸ The methylene linkage is indicated by the group.

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LOWER HOMOLOGUE

ITEM (C) The proposed modification of the reference is to interchange these structurally similar positional isomers or homologues in the prior compositions and methods of use.

ITEM (D) One of ordinary skill in the art at the time of the invention was made would have been motivated to make the proposed modification. One would expect the respective agents to possess a community of properties in common in view of the close

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structurally similarity pointed out above. That is one would expect to obtain additional active agents having the prior art use by such a modification of the prior art active agents. See *In re Payne*, 606 F.2d 303, 313, 203 USPQ 245, 254 (CCPA 1979). See *In re Papesch*, 315 F.2d 381, 137 USPQ 43 (CCPA 1963) and *In re Dillon*, 919 F.2d 688, 16 USPQ2d 1897 (Fed. Cir. 1991). For further illumination one is referred to MPEP 2144.09.

In the remand the board also pointed to the fact that the Examiner did not address each claim separately in spite of the fact that the claims stood or fell together, 37 CFR 1.192(c)(7)⁹.

Claim 8 depends from claim 14 and specifies that the composition contains 0.01 to 10% of the active agent and 0.1 to 90% of an additional agent. The claimed range is clearly within the amounts specified by the reference (note third full paragraph of column 2) and embraces the amounts exemplified in the Examples 1-6 of the reference. It would readily apparent to one of ordinary skill in the art the claimed obvious active agents would be used in the same amounts and the same manner as specifically taught by the reference.

Claim 14 has been addressed fully and separately above.

⁹ 37 CFR § 1.192 (c)(7)

Grouping of claims. For each ground of rejection which appellant contests and which applies to a group of two or more claims, the Board shall select a single claim from the group and shall decide the appeal as to the ground of rejection on the basis of that claim alone unless a statement is included that the claims of the group do not stand or fall together and, in the argument under paragraph (c)(8) of this section, appellant explains why the claims of the group are believed to be separately patentable. Merely pointing out differences in what the claims cover is not an argument as to why the claims are separately patentable. (*emphasis added*)

Claim 16 depends from claim 14 and specifies that the composition contains 0.01 to 10% of the active agent. The claimed range is clearly within the amounts specified by the reference (note third full paragraph of column 2) and embraces the amounts exemplified in the Examples 1-6 of the reference. It would readily apparent to one of ordinary skill in the art the claimed obvious active agents would be used in the same amounts and the same manner as specifically taught by the reference.

Claim 17 depends from claim 14 and specifies that the composition contains 0.05 to 8% of the active agent. The claimed range is clearly within the amounts specified by the reference (note third full paragraph of column 2) and embraces the amounts exemplified in the Examples 1-6 of the reference. It would readily apparent to one of ordinary skill in the art the claimed obvious active agents would be used in the same amounts and the same manner as specifically taught by the reference.

Claim 18 depends from claim 14 and specifies that the composition contains 0.1 to 5% of the active agent. The claimed range is clearly within the amounts specified by the reference (note third full paragraph of column 2) and embraces the amounts exemplified in the Examples 1-6 of the reference. It would readily apparent to one of ordinary skill in the art the claimed obvious active agents would be used in the same amounts and the same manner as specifically taught by the reference.

While claim 21 has been address separately above, the board point specifically to the claim reference to a "re-fattening agent"¹⁰. The claimed component is clearly within

¹⁰ A re-fattening agent is an agent added to cosmetics, particularly cleansing agents, to relieve their drying effects and includes agents such as isopropyl myristate, propylene glycol and Softigen®.

the components in compositions specified by the reference note second full paragraph of column 2 and the compositions exemplified in the Examples 1-6 of the reference. It would readily apparent to one of ordinary skill in the art the claimed obvious active agents would be used in the same amounts and the same manner as specifically taught by the reference including use in the compositions containing re-fatting agents.

Claim 22 has been addressed fully and separately above.

Claim 24 has been addressed fully and separately above.

Claim 25 depends from claim 24 and specifies that the surface treated is skin. HOPP refers to cosmetic¹¹ compositions throughout the reference. It would be readily apparent to one of ordinary skill in the art the claimed obvious active agents would be used in the same cosmetic compositions and in the same manner specifically taught by the reference.

It is noted that in their reply brief of Paper No. 22 Appellants submitted additional evidence in the form of screening tests and a reference written in a foreign language. The screening test data is not presented in proper form, see 37 CFR 1.132. As such it has been given little weight in consideration of the patentability of the instant claims. The reference is not in English and a translation was not provided. As such, the reference has not been considered. It is further noted, that the assertion of one expecting similar properties in view of the close structural similarity of the instant active agents to those of the prior art is not an assertion of identical properties but rather

¹¹ It is believed that everyone recognizes that a cosmetic would be a composition applied to body surfaces, particularly the skin.

similar properties. After all the agents are not identical in every respect and one would not expect identical properties.

Applicants assert that the experimental evidence disclosed in the specification demonstrates unexpected advantages of the claimed compounds compared to the compounds of HOPP. It is unclear what evidence in the specification applicants are relying upon and they do not point to any specific evidence. It is noted that in Paper No. 13 it was pointed out to applicants that the tables set forth in the specification have been carefully considered but not found persuasive of patentability. The tables do not make any direct comparison of a prior art compound with the structurally closest claimed compounds. As such there is no evidence that the claimed compounds possess unexpectedly superior properties or properties different from the prior art. Applicants simply do not this address point. It is of no moment that the prior art does not teach the same activity or utility for the prior art compounds as that described by applicants. The skilled artisan need possess only some motivation to modify the prior art compound, and that such motivation need not coincide with the one driving an applicant. The motivation is related to the uses one skilled in the art would expect that compound to have upon analyzing the prior art. That an applicant comes upon a use of a compound that is not taught by the prior art does not speak to the compound's nonobviousness. *In re Shetty*, 195 USPQ 753 (CCPA 1977); *In re Lintner*, 173 USPQ 560 (CCPA 1972); *In re Hoch*, 166 USPQ 406 (CCPA 1970). Applicants' discussion of the facts of each of these cases is noted, but does not change the fact here that there is no actual evidence of any

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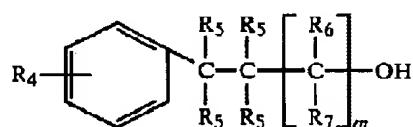
differences in properties between the prior art compounds and the closest claimed compounds.

Applicants assert that the declaration filed under 37 CFR 1.132 on September 23, 2003 shows that lipophilicity and topology play a major role in the biocidal activity of the instant compounds. The declaration has been carefully considered but not found persuasive of patentability. First, whether or not this is the case it does not demonstrate that the claimed compounds possess unexpectedly superior properties or properties different from the prior art. It is particularly noted that as to all of the compounds tested in the declaration, there is no direct comparison of a prior art compound with the structurally closest claimed compounds. As such there is no evidence that the claimed compounds possess unexpectedly superior properties or properties different from the prior art.

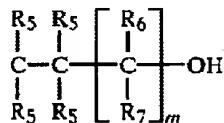
Claims 8, 13, 14, 16-18, 21-25 and 33-35 stand rejected under 35 U.S.C. 103(a) as being unpatentable over SIPOS (USP 4,321,257).

Adhering to the guidelines set forth in the record MPEP 706.02(j):

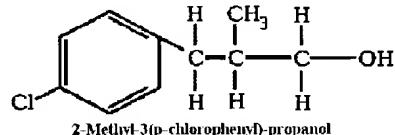
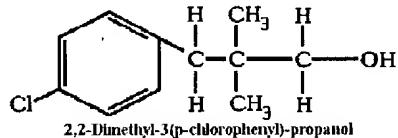
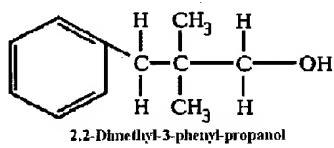
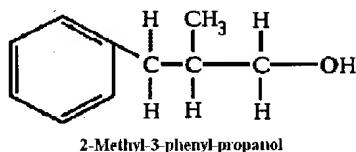
ITEM (A) The reference generically teaches the claimed compositions or active agents, note the phenyl alkanols given at the bottom of column 4. Also, note the agents specifically referred to in lines 43-51 of column 5. As is readily seen in the picture in bottom of column 4 of the reference, SIPOS generically teaches agents having the structure that can be pictured as



wherein, *inter alia*, m may be 1; R_4 may be halogen¹² or C₁ to C₄ alkyl; and R_5 , R_6 and R_7 may be independently hydrogen or C₁ to C₃ alkyl wherein the total of carbon atoms in the structure



is 3 to 9 carbon atoms. Also, in lines 43-51 of column 5, agents specifically referred to that may be pictured as



These active agents are disclosed in the reference as being useful in antimicrobial compositions¹³. It is readily noted by one looking at the reference that throughout the

¹² Halogen is known in to those familiar in the art to be the elements in the Group VIIA of the Periodic Table, e.g., fluoro (-F), chloro (-Cl), bromo (-Br).

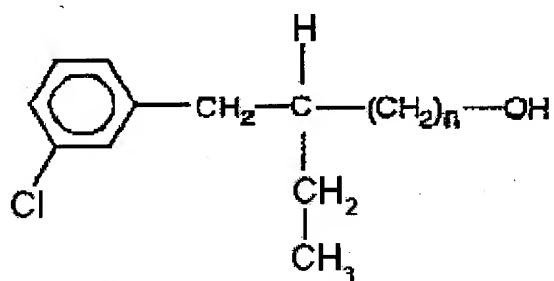
¹³ Note at the bottom of column 5 through column 9.

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reference mention is made of variety carriers¹⁴ including alcohols (ethanol in the Examples). Throughout the reference the compositions are indicated as being used topically¹⁵.

ITEM (B) The prior art differs from what is claimed only in that the reference is generic and/or teaches compounds, compositions and their use wherein the an active agent is a structurally similar positional isomer or homologue. This is readily apparent from by looking at instant claims 13, 14, 21, 22 and 24.

Claim 13 reads on compounds that have the structure that may be pictured as



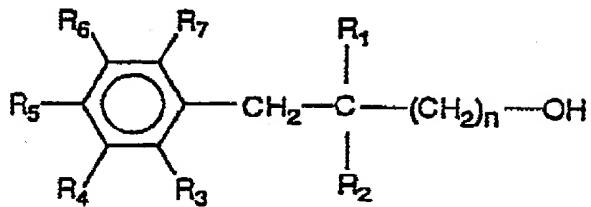
wherein n can be 1 or 2.

Claim 14 reads, *inter alia*, on a composition comprising an alcohol, solvent or surfactant and a compound of the formula

¹⁴ Note the second full paragraph of column 6 and the third full paragraph of column 9.

¹⁵ Topical application is known to mean application to the surface of the body such as the skin.

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wherein

R_1 may be hydrogen, or C_{1-8} alkyl

R_2 may be C_{1-8} alkyl

R_3-R_7 may be hydrogen, halogen or C_{1-8} alkyl, and

n is 1 or 2

provided

(i) when R_1 and R_3-R_7 are hydrogen, then n is 2;

(ii) when R_1 and R_2 are C_{1-6} alkyl and

a) R_3-R_7 are hydrogen, or

b) R_5 is methyl or chloro and $\text{R}_3, \text{R}_4, \text{R}_6, \text{R}_7$ are hydrogen, then n is 2;

(iii) when R_1, R_2 and R_4 are methyl and R_3 and R_5-R_7 are hydrogen, then n is 2;

(iv) when $\text{R}_1, \text{R}_3, \text{R}_4, \text{R}_6$ and R_7 are hydrogen and R_5 is methyl, isopropyl or tert-butyl, then n is 2;

(v) when $\text{R}_1, \text{R}_3, \text{R}_6$ and R_7 are hydrogen, R_2 is methyl and R_4 and/or R_5 are hydrogen or C_{1-6} alkyl, then n is 2;

(vi) when R_1 and R_4-R_7 are hydrogen, R_2 is methyl or ethyl and R_3 is methyl, then n is 2; and

(vii) when $\text{R}_1, \text{R}_3, \text{R}_5$ and R_7 are hydrogen, R_2 is methyl, R_4 and R_6 are methyl or R_4 is hydrogen, and R_6 is methyl, then n is 2;

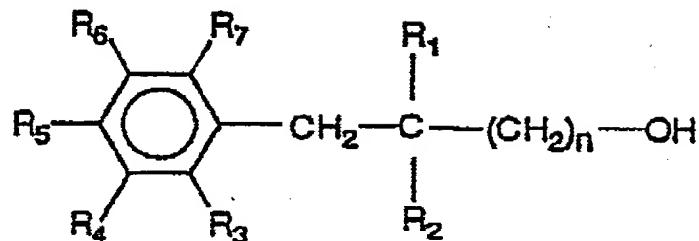
Claim 21 reads, *inter alia*, on a shampoo or shower gel comprising

an alcohol, solvent or surfactant,

a re-fattening agent

and a compound of the formula

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wherein

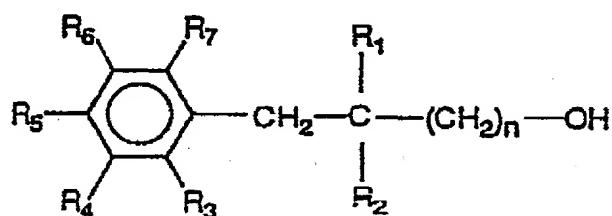
 R_1 may be hydrogen, or C_{1-8} alkyl R_2 may be C_{1-8} alkyl R_3-R_7 may be hydrogen, halogen or C_{1-8} alkyl, and

n is 1 or 2

provided

when R_1 , R_3 , R_4 , R_6 and R_7 are hydrogen and R_5 is methyl, isopropyl or tert-butyl, then n is 2;Claim 22 and 24 read, *inter alia*, method comprising apply to a surface a composition comprising an alcohol, solvent or surfactant

and a compound of the formula



wherein

 R_1 may be hydrogen, or C_{1-8} alkyl R_2 may be C_{1-8} alkyl R_3-R_7 may be hydrogen, halogen or C_{1-8} alkyl, and

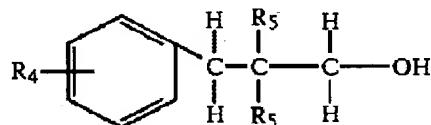
n is 1 or 2

provided

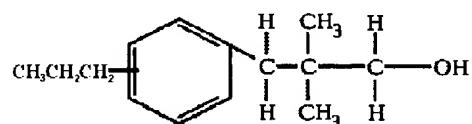
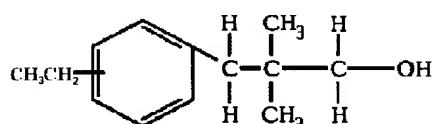
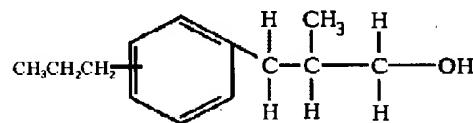
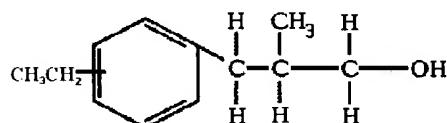
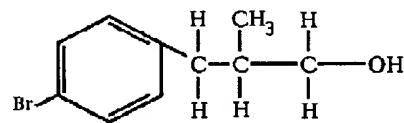
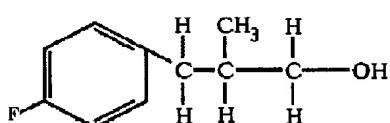
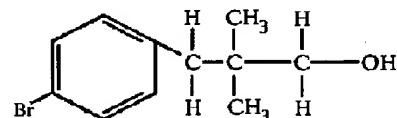
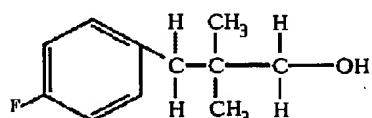
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when R₁, R₃, R₄, R₆ and R₇ are hydrogen and R₅ is methyl, isopropyl or tert-butyl, then n is 2.

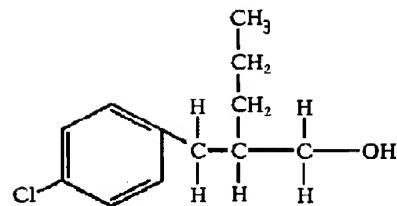
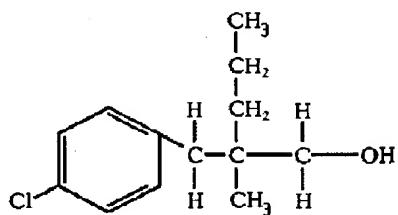
One would recognize that the claims read on compounds, compositions and their use containing as active agent that with the generic disclosure of the reference. For example, the claims read on compounds and active agents that overlap the genus of the reference within a group of agents that may be represented by the formula pictured as



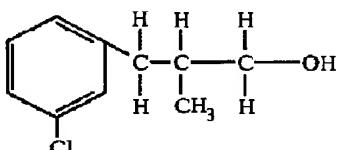
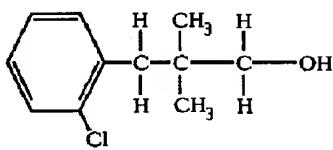
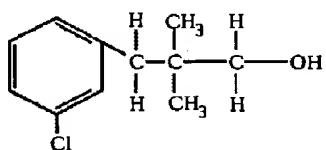
wherein R₄ may be halogen or C₁ to C₄ alkyl; and the R₅'s may be independently hydrogen or C₁ to C₃ alkyl. In particular, besides the positional isomers and adjacent homologues discussed below, the claims read on agents within the prior art genus that are very similar to the specific agents disclosed such as halogen analogs and other homologues. For example,



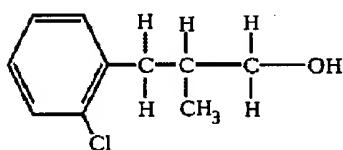
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As also, the claims read on positional isomers of the agents disclosed in the reference. For example,

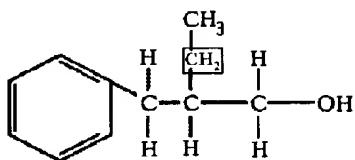
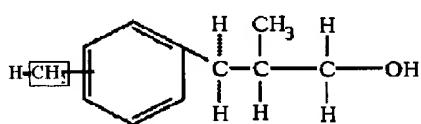


Also note this compound is an adjacent homologue of the compound of claim 13.

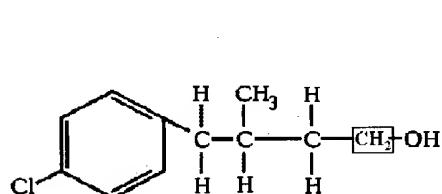
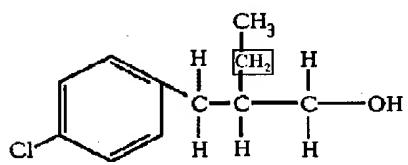
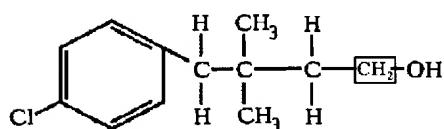
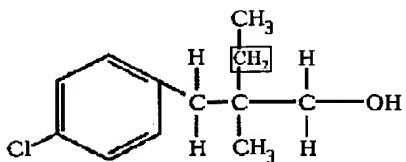
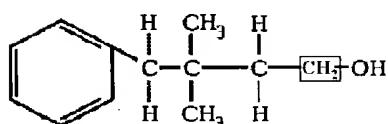
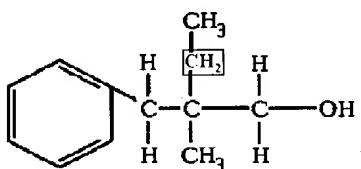
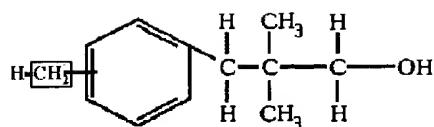
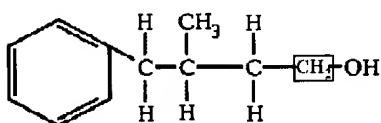


The structural relationship of these claimed active agents compared to the SIPOS active agents is characterized as "positional isomers". Those familiar with chemical practice understand that this means the chloro group on the phenyl ring in different positions in the respective compounds as which can be readily seen by comparing the pictures of the prior art compound set forth above.

The claims also read on agents that differ only in a homologous manner. There are a number of adjacent homologues such as:



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This compound is a positional isomer of the compound of claim 13.

ITEM (C) The proposed modification of the reference is for 1) one to use the specific active agents disclosed (i.e., the specific agents listed in lines 43-51 of column 5) in the reference in compositions of the prior art in the manner the reference specifically teaches, 2) for one to use agents that are within the genus of the reference in the compositions and methods in the manner specifically taught by the reference and/or 3) to interchange structurally similar positional isomers or homologues of the prior art active agents and to use such in the compositions and methods of the prior art in the manner the reference specifically teaches one to do.

ITEM (D) One of ordinary skill in the art at the time of the invention was made would have been motivated to make the proposed. First, the reference specifically suggest to

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one to do such¹⁶ and one would clearly expect to obtain the results specifically taught by the reference. Second, one would expect other species within the genus to be used in the same manner since this is what the reference itself suggests. Third, the homologues and positional isomers of the prior art active agents would be expected to possess a community of properties in common because of the close structurally similarity pointed out above. That is one would expect to obtain additional active agents having the prior art use by such a modification of the prior art. See *In re Payne, supra*; *In re Papesch, supra* and *In re Dillon, supra*. For further illumination one is referred to MPEP 2144.09. The teaching of equivalence of the homologues is reinforced by the teaching of the reference itself. SIPOS indicates that the R₄ group may be an alkyl of C₁ to C₄ and the R₅ group may be an alkyl of C₁ to C₃, which embraces methyl, ethyl, propyl, and butyl, which is a homologous series. The reference clearly indicates that the homologues are considered to be equivalents, i.e., possess similar properties. The teaching of equivalence of the positional isomers is reinforced by the reference teaching that the R₄ group is attached by a floating bond¹⁷ in the formula. The reference clearly suggests that active agents having the R₄ group at different positions on the phenyl ring are considered equivalent, i.e., possessing similar properties.

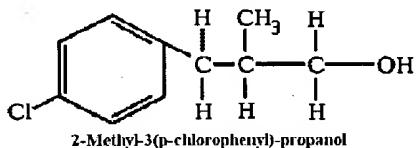
¹⁶ Note the specific agents listed in lines 43-53 of column 5 specifically picture above are within the purview of the active agents of claims 21, 22 and 24.

¹⁷ The bond is not attach to a specific carbon atom on the phenyl ring. This is recognized in the art to be a floating bond and is recognized to indicated that the R₄ may be attached to any available carbon atom on the phenyl ring.

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Claim 8 depends from claim 14 and specifies that the composition contains 0.01 to 10% of the active agent and 0.1 to 90% of an additional agent. The claimed range is clearly within the amounts specified by the reference (note the last paragraph of column 5) and embraces the amounts of potentiator agent¹⁸ used in the examples of the reference. It would be readily apparent to one of ordinary skill in the art the claimed obvious active agents would be used in the same amounts and the same manner as specifically taught by the reference.

Claim 13 has been addressed above. It is pointed out again, the claim reads on a compound within the genus of the compounds of the reference. Also, the claimed compounds are very structurally similar to specific compounds listed in that the claimed compound is an adjacent homologue and positional isomer of the SIPOS compound



For the same reasons discussed above, one would expect the claimed compound to possess similar properties to the prior art compound because of the close structural similarities of positional isomers and homologues as discussed above.

Claim 14 has been addressed fully and separately above.

Claim 16 depends from claim 14 and specifies that composition contains 0.01 to 10% of the active agent. The claimed range is clearly within the amounts specified by the reference (note the last paragraph of column 5) and embraces the amounts of potentiator agent used in the examples of the reference. It would be readily apparent to

¹⁸ The active agents in question here are characterized as potentiator agents in SIPOS.

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one of ordinary skill in the art the claimed obvious active agents would be used in the same amounts and the same manner as specifically taught by the reference.

Claim 17 depends from claim 14 and specifies that composition contains 0.05 to 8% of the active agent. The claimed range is clearly within the amounts specified by the reference (note the last paragraph of column 5) and embraces the amounts of potentiator agent used in the examples of the reference. It would be readily apparent to one of ordinary skill in the art the claimed obvious active agents would be used in the same amounts and the same manner as specifically taught by the reference.

Claim 18 depends from claim 14 and specifies that composition contains 0.1 to 5% of the active agent. The claimed range is clearly within the amounts specified by the reference (note the last paragraph of column 5) and embraces the amounts of potentiator agent used in the examples of the reference. It would be readily apparent to one of ordinary skill in the art the claimed obvious active agents would be used in the same amounts and the same manner as specifically taught by the reference.

While claim 21 has been address separately above, the board point specifically to the claim reference to a "re-fattening agent". The claimed component is clearly within the components in compositions suggested by the reference note third full paragraph of column 9 and the compositions exemplified in the examples of the reference that make reference to agents such as propylene glycol and isopropyl myristate. It would be readily apparent to one of ordinary skill in the art the claimed obvious active agents would be used in the same manner specifically taught by the reference.

Claim 22 has been addressed fully and separately above.

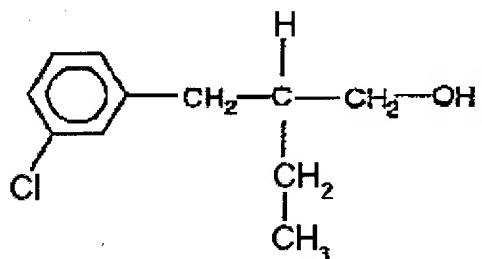
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Claim 24 has been addressed fully and separately above.

Claim 25 depends from claim 24 and specifies that the surface treated is skin.

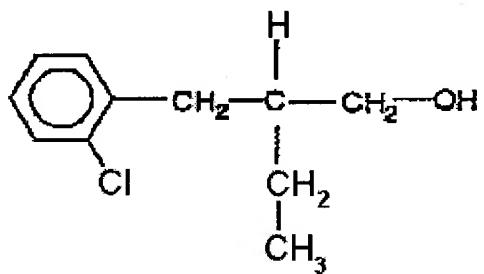
The reference refers to topical compositions throughout the reference. It would be readily apparent to one of ordinary skill in the art the claimed obvious active agents would be used in the same topical compositions specifically taught by the reference.

Claim 33 depends from claim 14 and limits the active agent to



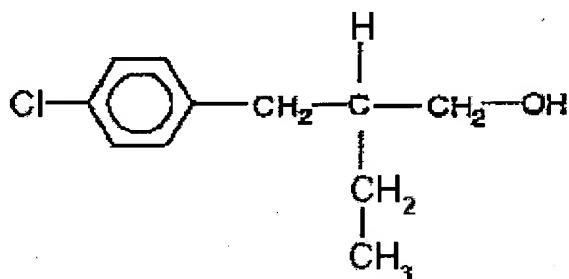
As pointed out above, this agent is within the genus suggested by the reference and is positional isomer and adjacent homologue of the specific species recited by the reference. For the same reasons discussed above, one would expect the instant active agent to possess similar properties and be used in the same manner as the agents taught in the reference.

Claim 34 depends from claim 14 and limits the active agent to



As pointed out above, this agent is within the genus suggested by the reference and is positional isomer and adjacent homologue of the specific species recited by the reference. For the same reasons discussed above, one would expect the instant active agent to possess similar properties and be used in the same manner as the agents taught in the reference.

Claim 35 depends from claim 14 and limits the active agent to



As pointed out above, this agent is within the genus suggested by the reference and is adjacent homologue of the specific species recited by the reference. For the same reasons discussed above, one would expect the instant active agent to possess similar properties and be used in the same manner as the agents taught in the reference.

It is noted that in their reply brief of Paper No. 22 Appellants submitted additional evidence in the form of screening tests and a reference written in a foreign language. The screening test data is not presented in proper form, see 37 CFR 1.132. As such it has been given little weight in consideration of the patentability of the instant claims. The reference is not in English and a translation was not provided. As such, the reference has not been considered. It is further noted, that the assertion of one expecting similar properties in view of the close structural similarity of the instant active agents to those of the prior art is not an assertion of identical properties but rather

similar properties. After all the agents are not identical in every respect and one would not expect identical properties.

Applicants point to the fact that the reference does not teach applicants properties. It is of no moment that the prior art does not teach all the same activity or utility for the prior art compounds as that described by applicants. The skilled artisan need possess only some motivation to modify the prior art compound, and that such motivation need not coincide with the one driving an applicant. The motivation is related to the uses one skilled in the art would expect that compound to have upon analyzing the prior art. That an applicant comes upon a use of a compound that is not taught by the prior art does not speak to the compound's nonobviousness. *In re Shetty, supra; In re Lintner, supra; In re Hoch, supra.* Applicants' discussion of the facts of each of these cases is noted, but does not change the fact here that there is no actual evidence of any differences in properties between the prior art compounds and the closest claimed compounds.

Applicants assert that the declaration filed under 37 CFR 1.132 on September 23, 2003 show the instant compounds possess unexpectedly high activity. The declaration has been carefully considered but not found persuasive of patentability. First, applicants' argument ignores the fact that claims 21, 22 and 24 read on agents specifically taught in the reference, note lines 43-53 of column 5. Second, as to all of the compounds tested in the declaration there is no direct comparison of a prior art compound with the structurally closest claimed compounds. As such there is no

evidence that the claimed compounds possess unexpectedly superior properties or properties different from the prior art compounds.

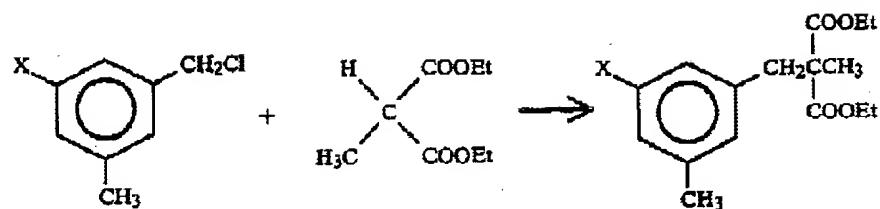
Applicants' discussion of the "Chem. Ber., Vol 125, pp. 2539-2552 (1992)" article is noted but not found persuasive. This article has been considered only to the extent of the translation provided by applicants in their response. First, there is no correlation to the steric effects shown in the dye molecules in the reference to the instant compounds. It is noted that the compounds shown in the article are structurally quite remote from the compounds at issue here. The fact that there exist other nonrelated compounds that may have unexpected properties, does not show that the instant compounds possess unexpected properties.

Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over HAFNER (USP 4,968,668) in view of VOGEL (A Textbook of Practical Organic Chemistry).

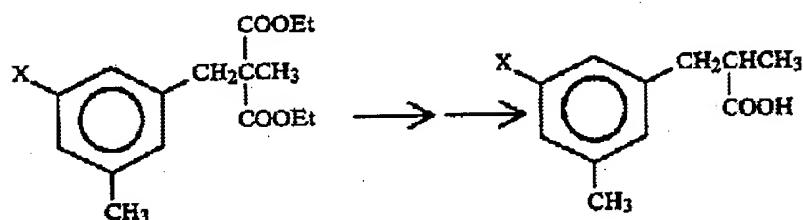
Adhering to the guidelines set forth in the record MPEP 706.02(j):

ITEM (A) HAFNER teaches an analogous process that differs from the claimed process in that the prior art does not recite step (a) and some of the reactants differ as to the substituents present. That is, HAFNER disclosed steps (b)-(d), note the schematic at the top of column 3, the discussion thereof and Example 3. HAFNER teaches dialkylating a monoalkylated malonic acid ester (diethyl methylmalonate) with a benzyl halide (3-methylbenzyl chloride or 3,5-dimethylbenzyl chloride).

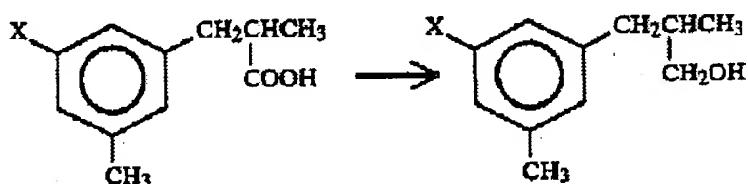
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subsequently saponify and decarboxylating to form the corresponding 3-arylpropanoic acid



and reducing to form the corresponding alcohol



VOGEL clearly demonstrates that claim step (a) is a standard method of synthesis of a C-substituted malonic ester (see the bottom portion of page 483 and Example III,153). Also note VOGEL further suggest that the C-substituted malonic ester can be further reacted to form a C-disubstituted malonic ester (see the first full paragraph of page 484) which corresponds to claim step (b) and the first step of the HAFNER process.

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ITEM (B) HAFNER teaches an analogous process that differs from the claimed process in that the prior art does not recite step (a) and some of the reactants differ as to the substituents present.

ITEM (C) The proposed modification of the reference is 1) prepare the starting material to be used in the HAFNER process by using the standard diethyl alkylmalonate synthesis as disclosed by VOGEL and 2) to use other analogous reactants to afford analogous products.

ITEM (D) One of ordinary skill in the art at the time of the invention was made would have been motivated to make the proposed modification. First, inherent in any process is the necessity of obtaining the starting materials. This almost always necessitates the starting material to have been prepared by some synthetic method. Even a commercial product has been synthesized¹⁹. One would be motivated to use a known method of synthesis since this would afford the starting material needed. This is merely common sense. Otherwise one would have to ignore the known methods of preparation and with the expenditure of a great deal of time and expense develop novel methods of preparations or reinvent the known methods of preparation. One would be motivated to use analogous starting materials since one would expect to obtain additional useful products.

Applicants' argument there is no motivation to use a different starting material or form different products is no found persuasive. First, the claim reads on reactants and

¹⁹ Unless in the rare instance where the starting material occurs naturally. The starting materials involved here do not occur naturally.

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products of HAFNER. As such the argument is not relevant to such reactants and products. To the extent, the claim reads on still other reactants and products not specifically disclosed by HAFNER, there is adequate motivation for reasons set forth in the last Office action.

(11) Response to Argument

On pages 11 to the middle of page 16 of their brief appellants have urged that the examiner has not properly followed the procedure of MPEP 706.04. Appellants were advised in the action mailed January 14, 2004 that the issue was a question of procedure. Accordingly, if they felt that the examiner had proceeded improperly by conducting a prior art search during his examination of the amended claims or if they felt that the examiner should have ignored pertinent prior art, then they should petition the examiner's action. Having failed to file an appropriate petition, appellants have acquiesced to the examiner's action and the issue is not appealable.

From the middle of page 14 to middle of page 16 appellants also make reference to varies undocumented evidence. None of this evidence is of record. Even had appellants presented it now, it would have been considered untimely. Accordingly, appellants' statements based there are considered to be unsubstantiated and not given any weight in the consideration of the patentability of the claims.

The rejection of claims 8, 14, 16-18, 21-25 under 35 U.S.C. 103(a) as being unpatentable over HOPP (USP 4,110,430).

It is considered that appellant's arguments have been specifically and adequately addressed in the rejection as set forth above. The following points are noted.

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From the bottom of page 17 to middle of page 19 appellants make reference to varies undocumented evidence. None of this evidence is of record. Even had appellants presented it now, it would have been considered untimely. Accordingly, Appellants' statements based there are considered to be unsubstantiated and not given any weight in the consideration of the patentability of the claims.

Appellants' argument that HOPP does not enable one to obtain modified compounds (bottom portion of page 21 of their brief) is without merit. First, the reference clearly suggest that the HOPP compounds are known in the art, see lines 40-45 of column 1. Obviously, compounds structurally similar to the compounds of HOPP may be obtained by teachings known in the art. Second, the rejection of instant claim 26 clearly demonstrates that one of ordinary skill in the art would readily know how to prepare such compounds.

Appellants' statement that corresponding foreign patents have been allowed over HOPP (top of page 22 of their brief) is simply not relevant to patentability under the Patent Code of the United States.

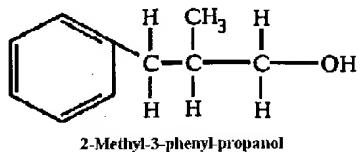
The rejection of claims 8, 13, 14, 16-18, 21-25 and 33-35 under 35 U.S.C. 103(a) as being unpatentable over SIPOS (USP 4,321,257).

It is considered that appellant's arguments have been specifically and adequately addressed in the rejection as set forth above. The following points are noted.

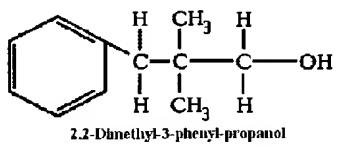
Appellants seriously misrepresent the examiner's position as to the disclosure of SIPOS (bottom portion of page 22 of appellants' brief). Appellants simply continue to ignore that SIPOS does in fact make reference to some of the claimed active agents.

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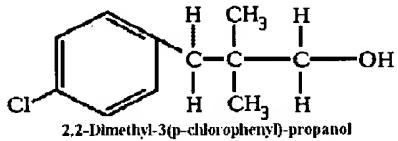
As pointed out above in the rejection, claims 21, 22 and 24 read on agents specifically taught in the reference (note lines 43-53 of column 5) which have the structures



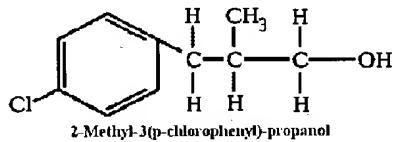
2-Methyl-3-phenylpropanol



2,2-Dimethyl-3-phenylpropanol



2,2-Dimethyl-3-(p-chlorophenyl)-propanol



2-Methyl-3-(p-chlorophenyl)-propanol

Appellants' argument that SIPOS does not enable one to obtain modified compounds (top portion of page 24 of their brief) is without merit. The rejection of instant claim 26 clearly demonstrates that one of ordinary skill in the art would readily know how to prepare such compounds.

In the bottom portion of page 25 of their brief, appellants make reference to varies undocumented evidence. None of this evidence is of record. Even had appellants presented it now, it would have been considered untimely. Accordingly, Appellants' statements based there are considered to be unsubstantiated and not given any weight in the consideration of the patentability of the claims.

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The rejection of claim 26 under 35 U.S.C. 103(a) as being unpatentable over HAFNER (USP 4,968,668) in view of VOGEL (A Textbook of Practical Organic Chemistry).

It is considered that appellant's arguments have been specifically and adequately addressed in the rejection as set forth above. The following points are noted.

Appellants seriously misrepresent the examiner's position as to the disclosure of HAFNER (bottom portion of page 26 of appellants' brief). Appellants simply continue to ignore that HAFNER does in fact teach reactants identical to the claimed reactants (while the claims read on still other reactants not specifically taught)²⁰. Note the claims provide for R₁ to be hydrogen, R₂ to be methyl (C₁ alkyl), R₃ to be hydrogen, R₄ to be methyl, R₅ to be hydrogen, R₆ to be hydrogen or methyl (C₁ alkyl), and R₇ to be hydrogen. These reactants are identical to the reactants used in HAFNER contrary to the representation by appellants.

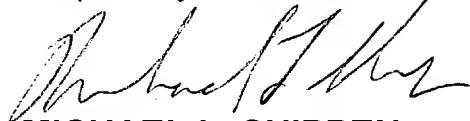
Appellants' assertion that the products possess unexpected properties is without merit. First, the claims read on products identical to those obtained by HAFNER. Second, as has been pointed out in the rejection, the various evidence relied upon by appellants for unexpected properties is lacking.

For the above reasons, it is believed that the rejections should be sustained.

²⁰ While the specific reactants and/or products of HAFNER had been provisioned out of the original claim, appellants later deleted the provisos so that the claim now reads on such reactants.

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Respectfully submitted,



**MICHAEL L. SHIPPEN
Primary Examiner
Art Unit 1621**

October 18, 2004

Conferees


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